Classes

IloEnv	A class of environments which manages memory and identifiers for modeling objects **Syntax**: IloEnv X; Declaring an environment 'X' we will be working in.
IloNumVar	Class of Numeric variables **Syntax:** IloNumVar Name(Environment, Lower-bound, Upper-bound, Type); Ex: IloNumVar Y(env, 0, IloInfinity, ILOFLOAT);
IloIntVar	Class of Integer Variables **Syntax:** IloIntVar Name(Environment, LB, UB);
IloBoolVar	Class of binary variables
IloExpr	Class of Expressions, The variables in an expression must all belong to the same environment as the expression itself. **Syntax:**IloExpr E= Y+Z; IloExpr objective(Environment name);
IloNumVarArray	Array class of Numeric variables **Syntax:** IloNumVarArray name(Environment, Size, LB, UB, Type)
IloIntVarArray	Array class of integer variables **Syntax**: IloIntVarArray name(Environment, Size, LB, UB)
IloBoolVarArray	Array Class of Boolean Variables **Syntax:** IloBoolVarArray name(Environment, size)
IloArray	Used to create multidimensional arrays **Syntax:** IloArray<IloArray<IloIntArray> > represents a 3D Integer Array
IloIntArray	Array class of basic integer class
IloNumArray	Array class of basic floating point class
IloBoolArray	Array class for basic Boolean class
IloModel	Class for models. Models consist of constraints, variables and objectives. **Syntax:** IloModel Modelname(Environment containing model)

Typedef

IloNum	Floating point numbers
IloInt	Signed Integers
Ilobool	Boolean numbers

Functions

IloMinimize	Minimizing an objective **Syntax:** IloMinimize (Environment name, Objective)
IloMaximize	Maximizing an objective **Syntax:** IloMaximize (Environment name, Objective**)**

Model.add() : Used to add constraints, objective function to the model.
Syntax: Model.add(Condition)
Model.add(Ilominimize(env, obj)

End() : Used to erase the expressions or environment to avoid wastage of memory space and confusion among variables or expressions
Syntax: Environment name.end() ;
Expression.end();

ILOSTLBEGIN : Macro which enables to run application with Standard Template Library

IloCplex : Class that solves optimization problem. An instance of class extracts and solves model.
Syntax: Extraction : IloCplex Extract_name(model name);
Solving : Extract_name.solve();
Result : Extract_name.getstatus();